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COMMAND OF THE AIR

BY REAR ADMIRAL ROBERT E. PEARY,

Washington, D. C.

We do not respect a man unless he possesses some elements of force of character.

And no nation can win respect or exert influence unless it stands for forcefulness and strength.

In no way can we, as a nation, stand so effectively for forcefulness, for strength, and for world influence, as by Command of the Air.

Our geographical position, our size, our resources, our wealth, our astonishing national growth, the watchfulness of Providence which has accompanied more than one of our national crises, all indicate that our rôle in the world's future, that our part in world influence, is to be of the first importance. Just as in the war with Spain, events external to us and beyond our control forced us from our position of isolation into that of a world power with possessions and interests circling the globe, so today events external to us, and entirely beyond our control, are shaping for us a position and an influence greater than ever before.

To touch upon only one of the directions in which that world influence will act, I will note our position as the most influential member of that American Federation which is surely coming, a federation of peaceful, prosperous, autonomous states, impregnable in their union, occupying the entire western hemisphere, seated upon two continents, reaching from pole to pole. In that coming world influence, the one great dominant thing which will overshadow all else will be air superiority and power.

Twenty-four hundred years ago Themistocles, Athenian statesman, soldier, and creator of Athenian naval policy, asserted the principle that "He who commands the sea commands all." With the naval victory of Salamis, which changed the history of the world, he drove home the truth of his principle, and sent it down the centuries to be a living axiom of national power and influence today.

"He who commands the sea commands all" still holds good. But it has a rival, the command of the air, without which it is beginning to be valueless, and in the near future it will be superseded entirely by the axiom "He who commands the air commands all."

However, we cannot yet minimize the importance of command of the seas. The battle cruiser offers us the quickest and surest means of securing that command, but that is another story. What we must do now is to insure command of the air, or we shall be hopelessly outclassed. Great and important as is a sufficient navy for our safety, I speak advisedly when I say that our air service of the near future will be more vital to our safety than our navy and our army combined.

Air Inferiority of United States

The United States Army was the first army to have an aeroplane in 1909. Our navy was the first navy to have a seaplane in 1911.

Yet where are we now? We have, army and navy together, less than 100 aeroplanes, and could hardly muster 50 aviators. Little Bulgaria with an area somewhat greater than Maine, and a population less than Massachusetts, has over 300 aeroplanes.

The personnel of the French air service today numbers more officers and men than there are in our entire army. The personnel of the British air service numbers more officers and men than we have in our entire navy. Germany has not less than 9,000 aeroplanes, and all these countries are constantly adding with feverish haste to their equipment in this department.

The Ministries of these nations which have thousands of aeroplanes, and whose frontiers are insignificant compared with ours, are constantly apologizing to the people of their countries for not being able to increase their air fleets fast enough to defend their country and protect the lives of their people.

The sooner we wake up to the fact that command of the air is absolutely vital to our safety, and that it can be secured more quickly and at less cost than any other form of defense, the better it will be for us.

Aeroplane Has Completely Changed Modern Warfare

The aeroplane has completely changed modern warfare. Surprise attacks are no longer possible. And if one of the contestants

can secure command of the air and deprive the other of it, conditions immediately become those of a fight between a blind man and one in possession of his eyesight. In the present struggle abroad the air strength of the contestants on the Western front is so nearly equal, that the balance wavers from side to side, first one and then the other having the advantage.

In our case, our geographical position gives us a natural advantage which if we utilize *now* should relieve us of anxiety.

An attack upon us must come by sea. Our coast line as a base gives us an inestimable advantage in aerial warfare, and will enable us to send out such a veritable cloud of aeroplanes, as would completely overwhelm and destroy any number of aeroplanes that could be transported on the decks of a hostile fleet, thus leaving us in the possession of our eyes and the enemy blinded.

But we must be ready *before* the fact. There will be no time to get ready when the attack comes. Once an enemy secures a base on our shores, any and every city in the country may be the prey of his air squadrons. And a single squadron of aeroplanes sweeping across New York, Philadelphia, Baltimore, or Washington, in a frightful shower of falling bombs would cause more damage in an hour, than our entire air service would cost.

Should Have 5,000 Aeroplanes on Each Coast

We should have at the very minimum not less than 2,000 seaplanes ready for duty on the Atlantic Coast, and an equal number on the Pacific, 5,000 on each coast would be much better.

At each important place squadrons of aeroplanes should be parked like tents of the summer encampment of the National Guard.

Do not think I am talking wildly. In 1900 there were some 700 automobiles in this country. Today there are some 3,000,000 and it has been estimated that the output for this year will be over 1,000,000. The growth of the aeroplane will be equally or more rapid than that of the automobile.

Aero Coast Patrol

I have the honor to be chairman of a Commission which is working on a definite constructive proposition that will give us a continuous picket line of seaplanes around the entire country to

warn of the approach of an enemy. A central committee made up of two U. S. Senators, a leader of the House, an Assistant Secretary, a Head of a Department, a New York banker, and one of our foremost inventors, is located in Washington. The Adjutant General of every state, and the Commanding Officer of each State Naval Militia is a member of the Commission.

The total cost of the system will be about \$500,000. This is one third as much as was raised both by France and by Germany by public subscription previous to the war for their air services. The cost of each section will be \$10,000. This is an amount easily within the reach of most coast communities and within the reach of hundreds of individuals in those communities. Maine was the first to take up and formally endorse this system, and Maine will have the honor of establishing the first station of the System this summer. Fourteen other states have the funds assured for a section of the system in each of those states.

The conception is this, a continuous picket line of seaplanes or flying boats fifty miles or more off shore and two thousand feet or more in the air, around our entire coasts from Eastport, Maine, to Brownsville, Texas, and from San Diego, California, to Cape Flattery, Washington, each machine traveling back and forth—back and forth—over its section or “beat,” a winged sentinel, forming a cordon, a continuous line of whirring shuttles, weaving a blanket of protection around the country.

The idea is to divide our entire coast lines into sections of convenient length, say about one hundred miles. Each of these sections and stations will be equipped with a seaplane. Each of these machines will carry a driver and an observer and be equipped with light wireless apparatus, powerful glasses and a sensitive microphone. When in active operation these seaplanes in each section will take their position some fifty miles off shore, and patrol their respective beats continuously back and forth, in clear weather two thousand feet or more above the sea, from which altitude ships fifty miles distant may be seen. At night or in the fog the seaplanes would, of course, sweep much lower, at all times themselves invisible to an enemy.

By means of the wireless, information as to the character, number and apparent destination of approaching ships will be transmitted to the shore station, and from these to Washington whence,

if the ships are hostile, orders will issue directing the movements of our fleet and the submarine squadrons for the preparation of the coast defenses and for the concentration of troops, if necessary, while reserve planes hurrying out will keep the approaching craft under continuous inspection while themselves invisible.

Such a system is a new departure. The like of it exists nowhere at present, and yet it involves no new principle, but is simply the utilization and multiplication of the known capabilities of a single seaplane.

Follow me a moment. One of these seaplanes is traversing its beat 50 to 100 miles west of San Francisco and 2,000 feet or more up in the air. A ship or ships appear on the horizon fifty miles farther out. The powerful glasses are brought into play by the observer. His trained eye recognizes the number, character, and course of the ships. The wireless crackles the information to the shore station. The shore station transmits it to the great government wireless station at San Diego. That station snaps it eastward across the Rockies. In a few minutes Washington knows all about it, and, if necessary, orders are snapped back to San Francisco, for whatever action is advisable.

Let us imagine it is war. This advance notice of the approach of the enemy is the first step. In modern warfare, hours and even minutes may spell victory. The enemy is still unaware that his approach is known, for the sentinel seaplane was invisible to him. With the next step a cloud of scout aeroplanes sweep out in such numbers as to overwhelm and destroy the enemy's aeroplanes, leaving him blinded. Then follow the squadrons of great battle tri-planes, each machine carrying several tons of high explosives to drop upon the hostile fleet. You can imagine the result.

In time of peace the undoubted improvement and perfecting of our seaplanes as a result of the fifty or more machines in this system in constant practice and training along our coasts may be worth the cost of the entire system. If the system results in training the entire personnel of the Militia Aviation Sections of our coast states, it will have returned full value on the cost of the system. And a single plane might discover, report and send assistance to a ship in distress, that with cargo would be equal in value to the total cost of the system.

It is proposed to supply the equipment of these stations

(\$10,000 for a station) by the private initiative and generosity of the coast communities. Once equipped the stations will be turned over to the control of the Naval Militia, and the maintenance and upkeep of the stations will be met by that Department.

England's Bitter Lesson

Two years ago England was as we are now, asleep, and with more reason than we, for the possibilities of the aeroplane were not then known, while we now have before us an object lesson which no intelligent mind that knows the facts can fail to understand. They felt secure as we do now. The idea that anything could reach or harm them in their tight little island was preposterous. Today the papers, the people, and members of Parliament in England are saying, "Give us a man at the head of our Air Department who can protect us from the airships of the enemy, and if he does not do it, *hang him.*"

We shall be saying the same in the near future, if we do not learn and utilize *now* the lesson Providence has put before us. We have the chance to learn it in peace and sunshine. Our neighbors across the water are learning it in tears and bloodshed.

Suppose such a horror from the air should fall upon this city as has already fallen more than once upon the east coast of England, leaving a trail of dead and dismembered women and children, mutilated men, and ruined property. Would the whole country flame with rage? Would there be a snarl of "Why has this happened?" "Who is responsible?" "Why were we not ready to prevent it?"

The following will give some idea of how death and destruction, fear, rage, and bitterness of spirit, have driven home to England the vital importance of air power. Equally instructive material could be presented from Germany, from France, from Italy, from Russia, but the British material is more convenient and accessible. *Mr. Balfour* in the House of Commons said:

It would avail nothing to England to have control of the sea unless it had also control of the air.

Lord Montagu of Beaulieu, in the House of Lords, March 9, said:

At the present time the air service is merely auxiliary to the fighting forces of the navy and army. I can see a time coming when the air service will be more important than the army and navy. We must get into the habit of looking at the air service not

as an auxiliary to the army and navy but as a great service which is an establishment of itself, and to which we shall have to look in future years for the defense of this country. The advantages of our insularity are rapidly disappearing. Upon the efficiency of the air service much will depend. Let it not be said with shame of our generation, that we did not trouble to guard in the air what our forefathers won on the sea.

Lord Beresford said:

The new air warfare is going to be of so tremendous a character that it may supersede the army and navy. Anyway we should be ahead in the air, the same as we are on the water.

On the 22d of March in the British House of Commons the following statements were made in the course of debate:

For dealing with this very pressing question of the air, there should be sittings *every* day and if necessary *all* day, until some solution is found for our third class position as an air power. Our national pride has suffered a blow which it will take us many years and much labor to recover from. Our very national existence in the next twenty years will lie in the ocean of the air. Within the next five or ten years we may live to see the sky darkened by aeroplanes. The idea of a country owning five hundred aeroplanes will be looked upon as a humorous event of the past. *The supremacy of the air lies ready to any government which has sufficient initiative to see to it.*

At a meeting called by the United Ward's Club of the City of London on March 28, a resolution was moved

that the meeting considers the most effective means of protection against air raids would be by the creation and maintenance of an efficient air fleet in addition to and independent of the existing naval and military requirements.

At this meeting Mr. Pemberton-Billing, a member of the House of Commons said:

What we want to bring about is something grander than the air defense of London. We want to demand of the government that the money, brains, ability, and resources we possess shall be employed, and that we shall gain as soon as possible and maintain forever the supremacy of the air. For the cost of two day's war we could have such a fleet of aeroplanes as would darken the skies. We must do it. This country must be supreme in the air. It has been suggested that I am a man of one idea. Before many years have passed that *one idea* will occupy the minds of many men of this country and women, too. Every inland town lies on the coast of the ocean of the air, liable to instant and violent attack. When we think that in about ten years' time countries will possess not 1,000 but 100,000 aeroplanes at the cost of a few battleships, it is a terrible thought,

These aeroplanes will fly at a speed of 100 to 120 miles and hour. Their powers of mobilization will be alarming. It means that if our relationship with another country is strained at 6 o'clock in the evening, before we arise in the morning it will be possible for our principal towns and cities to be laid waste.

Lord Montagu of Beaulieu, guest of the Liberal War Committee at a luncheon at the House of Commons, March 22, said among other things:

He had come to speak to a serious and well informed body on the need of concentrating special attention and effort on aviation. He was pleading for a more energetic policy in regard to all forms of air craft. . . . The struggle for supremacy in the air was only just beginning and would not stop when peace came. . . . Compared with the cost of dreadnaughts, field guns, and armies in the field, the cost of even a huge aerial fleet would be small. What was wanted now in our statesmen and in our nation was more power of imagination. They could neither win nor hold an Empire merely by "safe" policies. "Safe" men were all very well for times of peace. But time came when they might be dangerous. What they wanted now was *new* men with *new* ideas. Problems of the air were all new. There were no precedents to bear in mind, no files to refer to, no historical works to consult. The new service would need leaders, who had ideals, foresight, imagination, and scientific training. These leaders must always have a clear vision of future possibilities, most of which were probabilities.

All that I have read applies equally to us. It might be said in Washington, in Committee room or on the floor of Congress.

One Week of War Cost Will Give Us the Lead

One week of present war cost to Great Britain would give this country such a fleet of aeroplanes as could in an emergency rise from our shores literally like a flock of sea-gulls, to defend and insure our national integrity.

The basic ideals of this country, born of our ancestry, our national growth, our physical position, are bigness and realization. These two ideals are our ever present though sometimes unconscious trend in every line of effort. Here is an opportunity for us to make good on these ideals on a great scale, by taking up in earnest the air service of this nation, recognizing that it is of crucial importance, and putting it and ourselves in the very world van.

Our geographical position, our national rank and standing, *our national safety, demand it.*

Our resources and mechanical genius not only permit it, but make it easily possible. Shall we do it?

Mr. Chairman, I would that I might have the power to transmit to this audience the intensity of my feeling on this subject.

It is vital, *vital*, VITAL to us, this Command of the Air.